Oxford Cambridge and RSA

OCR-set Assignment

Sample Assessment Material

OCR Level 3 Alternative Academic Qualification Cambridge Advanced Nationals in Engineering

Unit F132: Engineering in practice

Scenario Title: Angled desk lamp

Valid for assessment from September 20XX to 20XX.
For use by students beginning the qualification in September 20XX.

This is a sample OCR-set assignment which should only be used for practice**.**

This assignment **must not** be used for live assessment of students.

The live assignments will be available on our secure website, 'Teach Cambridge'.

The OCR administrative codes linked to this unit are:

- unit entry code F132
- certification code H027/H127

The regulated qualification number linked to this unit is:

Y/651/0635

Duration

About 30 hours of supervised time (GLH)
(work that **must** be completed under teacher supervised conditions)

All this material **can** be photocopied. Any photocopying will be done under the terms of the Copyright Designs and Patents Act 1988 solely for the purposes of assessment.

SAMPLE

© OCR 2025

Contents

Information and instructions for Teachers....3
Using this assignment....3
Information for delivering tasks....5
Tasks for students and assessment criteria....6
Scenario....6
Part A: Mechanical Analysis, Drawing and Prototype Manufacture....8
Task 1:....8
Task 2:....10
Task 3....11
Task 4....12
Task 5:....14
Part B: Electronic Circuit Analysis, Drawing and Prototype Manufacture....15
Task 6....15
Task 7....18
Task 8....19
Task 9....21
Appendix A....23
Teacher Observation Record Form – Task 4....24
Guidance notes....25
Teacher Observation Record Form – Task 8....26
Guidance notes....27
NEA Command Words....28

SAMPLE

© OCR 2025

Information and instructions for Teachers

Using this assignment

This assignment provides a scenario and set of related tasks that reflect how engineers develop new products by analysing existing products to determine whether they have been successful. By analysing a product, engineers have the opportunity to understand the materials, manufacturing processes, electronic devices and aesthetic factors that need to be considered before a product can be manufactured. By understanding these decisions, engineers will be able to prototype new products and test them with potential users.

You can give this to students on or after 1 June 20XX to help them understand it before they start using it for assessment. The dates for which students can use it for assessment are shown on the front cover.

The assignment:

- Is written so that students have the opportunity to meet the requirements of all assessment criteria for the unit.
- Will tell students if their evidence must be in a specific format. If the task does not specify a format, students can choose the format to use.
- **Must** be completed under teacher supervision. Any unsupervised time allowed will be explained in the assessment guidance.
- We have estimated that this assignment will take about 30 hours of supervised time to complete.
  Students should need approximately:
  - 3 hours to complete Task 1
  - 4 hours to complete Task 2
  - 2 hours to complete Task 3
  - 6 hours to complete Task 4
  - 2 hours to complete Task 5
  - 3 hours to complete Task 6
  - 3 hours to complete Task 7
  - 5 hours to complete Task 8
  - 2 hours to complete Task 9

You **must**:

- Use an OCR-set assignment for summative assessment of students.
- Familiarise yourself with the assessment criteria and assessment guidance for the tasks. These are given at the end of each student task. They are also with the unit content in **Section 5** of the Specification.

© OCR 2025

Assessment guidance is only given where additional information is needed. There might not be assessment guidance for each criterion.

- Make sure students understand that the assessment criteria and assessment guidance tell them in detail what they need to do in each task.
- Read and understand **all** the rules and guidance in **Section 7** of the Specification **before** your students start the set assignments.
- Make sure that your students complete the tasks and that you assess the tasks fully in line with the rules and guidance in **Section 7** of the Specification.
- Make students aware of all relevant health and safety considerations before starting any practical work.

- Make sure that students are appropriately supervised during any practical work and are working safely.
- Intervene during practical work if necessary to ensure students' safety. In such instances, staff should assist the student to ensure their safety and so that they can continue with the subsequent assessment tasks, but they cannot be credited for the criteria directly addressing the practical skills where they have had to be helped unless the assessment guidance states otherwise.
- Give your students the engineering **Student guide to NEA assignments before** they start the assignments.
- Complete the **Teacher Observation Record** for **Task 4** and **Task 8**. You **must** follow the guidance given when completing it.

You **must not**:

- Use live OCR-set assignments for practice or formative assessment. This sample assessment material **can** be used for practice or formative assessment.
- Use this sample assessment material for live assessment of students.
- Allow group work for **any** task in this assignment.

You **can**:

- Make modifications to this assignment, as follows:
  - you can use alternative electronic components if you have them available or if components with the same model numbers are not available. The components used must be clear in the evidence provided and you must ensure the simulated and physical circuits function correctly.
- **No changes** are allowed to the:
  - assessment criteria.
  - complexity and demand of the requirements of the task.
  - unit content that is assessed.
  - the amount and detail of guidance you give your students.
- **No templates** other than those provided by OCR can be used for this

SAMPLE

 © OCR 2025

assignment.

Section 6.2 of the Specification gives you more information about what to do with modified assignments for moderation.

SAMPLE

 © OCR 2025

Information for delivering tasks

Task	Requirements
Task 1	• Each centre must decide on the exact product model and type of product they purchase. It must be similar to the one given in the set assignment and it must use appropriate fixings (e.g. semi-permanent) that would permit and allow disassembly by the teacher/technician. • Ensure that the centre has appropriate manufacturing processes, as set out in the unit content, and raw materials to allow students to make their mechanical prototypes. • It is advisable for the teacher to take an audio-visual recording showing the disassembly of the product so that students can refer back to it. • During the disassembly you must not identify the materials, manufacturing processes (e.g. joints, fixings and finishes) or the function of the components. • Students must not share their photographic evidence for this task.
Task 2	• Students can use a 3D CAD program for this task.
Tasks 1 to 5	• There is no set process required to manufacture the mechanical prototype, this gives students flexibility to decide on the processes to use. However, students must select from the manufacturing processes listed in the unit content of the specification. • Students can use any metal or polymer to manufacture their prototype from. They can also use wood for formers and/or jigs/fixtures. • There is no requirement to make or purchase any of the electrical components for the product, for example switches or cable.
Task 6 to 9	• You can use alternative electronic components if you have them available or if components with the same model numbers are not available. The components used must be clear in the evidence provided. • You must ensure the simulated and physical circuits function correctly before students attempt the set assignment. • The electronic circuit prototype must not be combined with the mechanical product prototype, which means students should produce two separate prototypes. • Students can either manufacture the electronic circuit using strip board and solder or using a printed circuit board and solder methods.

Pages 1-5 are for teachers only. Please do **not** give **Pages 1-5** to your students.

You can give **any** or **all** of the pages **that follow** to your students.

© OCR 2025

SAMPLE

Tasks for students and assessment criteria

Unit F132: Engineering in Practice

Scenario Title: Angled desk lamp

Valid for assessment from September 20XX to 20XX.

For use by students beginning the qualification in September 20XX.

Scenario

You work for a lighting company that manufactures different types of lighting solution.

The product you have been asked to investigate is an **angled desk lamp**.

To ensure that a work area is well lit for different purposes, angled desk lamps need their height, angle and tilt to be adjustable.

An example of an angled desk lamp is shown below**.** The angled desk lamp you are using may look slightly different to this one.

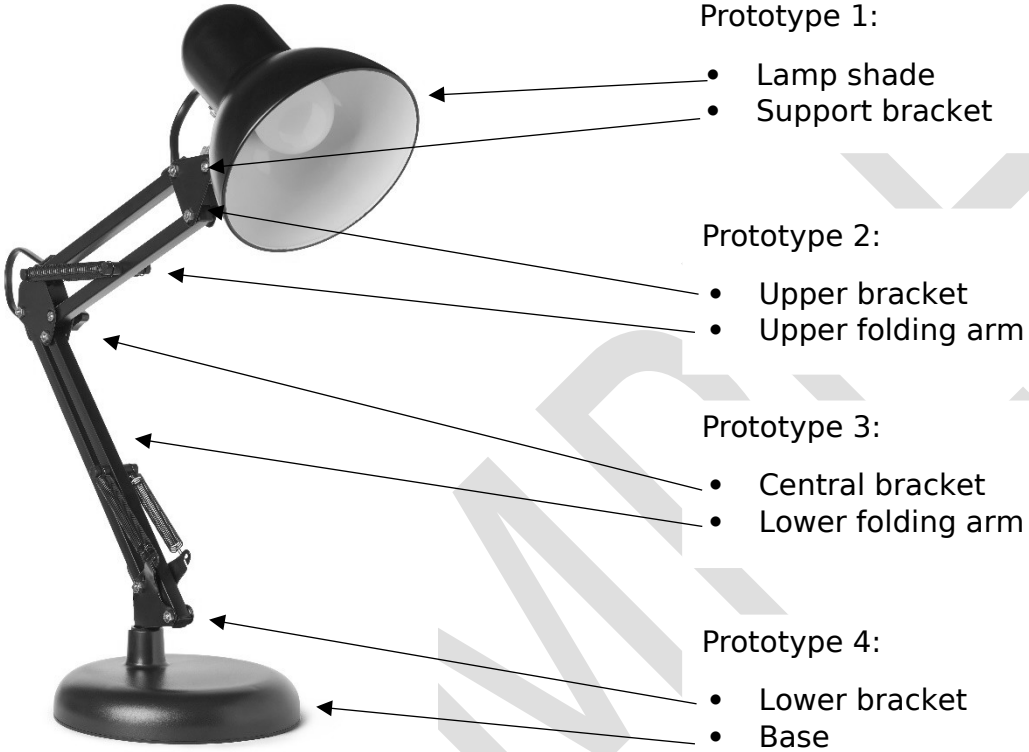
SAMPLE

© OCR 2025

Part A: Mechanical Analysis, Drawing and Prototype Manufacture

The non-standard components in the angled desk lamp have been grouped together as shown in **Fig. 1**.

Fig. 1



Each prototype (1, 2, 3 and 4) may also contain relevant standard components, such as nuts and bolts.

You will be told which **one** of these prototypes to use in your assignment.

Note you do not need to make or include any of the electrical components from the angled desk lamp, for example the bulb holder, switches, or cable.

© OCR 2025

Part A: Mechanical Analysis, Drawing and Prototype Manufacture

Task 1:

Product Analysis

Topic Area 1 is assessed in this task.

Your teacher will demonstrate the disassembly of an angled desk lamp similar to the one shown in the scenario.

Before you can plan for and complete the manufacture of the prototype you have been given, you need to understand what it is made from, how it works and its function within the overall product.

The task is:

Complete a mechanical inspection and analysis of the components for the prototype you have been given from the angled desk lamp.

Your evidence **must** include:

- A written report with annotated photographs
- The methods used and results and dimensions recorded from the inspection

Use the assessment criteria below to tell you what you need to do in more detail.

Pass	Merit	Distinction
P1: Describe the function of the components in the prototype, identifying the materials, type of joints and fixings and finishes used. (PO2)	**M1: Explain** how the prototype contributes to the function of the product. (PO2)	
P2: Measure each component in the prototype using appropriate measurement devices and record the results. (PO4)		

SAMPLE

© OCR 2025

Assessment Guidance

This assessment guidance gives you information to meet the assessment criteria. There might not be additional assessment guidance for each criterion. It is only given where it is needed. You must read this guidance before you complete your evidence.

Assessment Criteria	Assessment guidance
P1 M1	• M1 is an extension of P1. Students need to explain how the prototype works in conjunction with other components as part of the overall function of the product
P2	• Students must use measurement devices which can enable a suitably accurate reading for the type and size of dimension being measured.

SAMPLE

© OCR 2025

Task 2:

Produce two-dimensional (2D) Computer Aided Design (CAD) mechanical drawings

Topic Area 2 is assessed in this task.

Having carried out your product analysis, you now need to produce 2D CAD engineering drawings of the prototype you are going to manufacture.

The task is:

Use a CAD software package to produce 2D CAD engineering drawings of the prototype which follow standard drawing conventions.

Your evidence **must** include:

- Annotated screenshots of CAD software being used to produce the engineering drawings.
- Final 2D CAD engineering drawings in a pdf file format.

Use the assessment criteria below to tell you what you need to do in more detail.

Pass	Merit	Distinction
P3: Produce an appropriate third angle orthographic projection of the non-standard component(s) in the prototype using engineering drawing standards. (PO4)	**M2: Produce** an appropriate sectioned/detailed view of **one** non-standard component from the prototype using engineering drawing standards. (PO4)	**D1: Produce** an appropriate isometric assembly projection for the prototype using engineering drawing standards. (PO4)

Assessment Guidance

This assessment guidance gives you information to meet the assessment criteria. There might not be additional assessment guidance for each criterion. It is only given where it is needed. You must read this guidance before you complete your evidence.

Assessment Criteria	Assessment guidance
P3	• An appropriate third angle orthographic projection drawing of **all** the non-standard component(s) for the prototype is required. • The dimensions need to be accurate compared to the physical component.
M2	• An appropriate sectioned/detailed view of **one** of the non-standard components drawn for P3 is required. • P3 and M2 combined must be sufficiently detailed to

SAMPLE

 © OCR 2025

	allow a competent third party to manufacture the component(s).
D1	• An assembly of all components for the prototype, including standard components, is required.

SAMPLE

 © OCR 2025

Task 3

Plan the safe manufacture of a mechanical prototype

Topic Area 3 is assessed in this task.

Before you can manufacture the prototype (Task 4) you need to plan how you will do this, what materials and processes you will use and the safety considerations. It is important that you think about sustainability considerations as part of this process.

The manufacture will include standard and non-standard components.

As this is a prototype the non-standard components can be made from any suitable metal or polymer.

The task is:

Produce planning documentation to use when manufacturing the prototype.

Your evidence **must** include:

- Written planning documentation.

Use the assessment criteria below to tell you what you need to do in more detail.

Pass	Merit	Distinction
P4: Produce a bill of materials for manufacturing the prototype, considering sustainability. (PO4)	**M3: Produce** a manufacturing plan for the non-standard component(s) in the prototype, including the correct sequence of operations and use of equipment/tools. (PO4)	
P5: Produce an appropriate risk assessment for manufacturing the prototype. (PO4)		

Assessment Guidance

This assessment guidance gives you information to meet the assessment criteria. There might not be additional assessment guidance for each criterion. It is only given where it is needed. You must read this guidance before you complete your evidence.

Assessment Criteria	Assessment guidance
P4	• Students show consideration of sustainability through selection of appropriate types of material and forms of supply which minimise waste and additional processing.

SAMPLE

© OCR 2025

SAMPLE

 © OCR 2025

Task 4

Manufacturing a mechanical prototype

Topic Area 4 is assessed in this task.

Now that you have produced your engineering drawing(s) and planning documentation, you are ready to manufacture your prototype. It is important that you think about sustainability considerations as part of this process.

You will now manufacture your prototype using your engineering drawing(s) and planning documentation.

As this is a prototype the non-standard components can be made from any suitable metal or polymer.

Your teacher will need to observe you.

The task is:

Manufacture the non-standard component(s) for your prototype and assemble the components into a workable prototype, following safe working practices.

Your evidence **must** include:

- A teacher observation record describing how you manufactured the prototype. This should be completed by your teacher and signed by you and your teacher.
- Annotated photographs and/or video evidence of manufacturing each non-standard component and the assembled prototype, supported by written notes where needed (e.g. covering sustainability considerations when manufacturing).

Use the assessment criteria below to tell you what you need to do in more detail.

Pass	Merit	Distinction
P6: Safely **manufacture** the non-standard component(s) of the prototype using appropriate hand and machine processes. (PO4)	**M4: Explain** how you have considered sustainability in your manufacture of the prototype. (PO2)	**D2: Assemble** the components into a workable prototype and integrate it back into the product. (PO4)

SAMPLE

© OCR 2025

Assessment Guidance

This assessment guidance gives you information to meet the assessment criteria. There might not be additional assessment guidance for each criterion. It is only given where it is needed. You must read this guidance before you complete your evidence.

Assessment Criteria	Assessment guidance
P6	• Teacher observation records should describe whether the processes and equipment/tools were set-up, operated and shutdown appropriately and whether their use was appropriate to the required task. • Students must be able to perform the task safely to achieve this criterion. Staff must intervene if safe working practices are not being followed but where this happens the criteria cannot be awarded as achieved.
M4	• Evidence is in the form of an explanation. Some aspects of the sustainability considerations may be things observed by the teacher in P6, so the Teacher Observation Record may act as supporting evidence as appropriate.
D2	• D2 requires a demonstration that the prototype can be assembled and that it can work with other corresponding parts of the overall product. This could be shown by assembling the prototype into the original whole product, or by combining it with other prototypes to assemble a whole product prototype.

SAMPLE

© OCR 2025

Task 5:
Evaluation of the mechanical prototype

Topic Area 5 is assessed in this task

It is good practice in industry to review the ways in which you work and the processes used as well as the end product.

You will now evaluate the mechanical prototype made in Task 4.

The task is:

Evaluate the prototype you have manufactured and the processes you followed.

Your evidence **must** include:

- A record of the dimensions of the non-standard components in the prototype.
- Photographic and written evidence of the visual and quantitative inspection and review of the prototype against the original product.

Use the assessment criteria below to tell you what you need to do in more detail.

Pass	Merit	Distinction
P7: Complete visual and quantitative inspection of the non-standard component(s) in the prototype, recording your dimensions and results. (PO4)	**M5**: **Analyse** the prototype against the engineering drawings and the original product. (PO3)	**D3: Evaluate** your planning and manufacture of the prototype. (PO3)

Assessment Guidance

This assessment guidance gives you information to meet the assessment criteria. There might not be additional assessment guidance for each criterion. It is only given where it is needed. You must read this guidance before you complete your evidence.

Assessment Criteria	Assessment guidance
P7	• Use inspection to measure and record dimensions and results.
M5	• Analyse the prototype made against the original product and analysis (task 1) and the drawings produced (task 2), explaining why there are any differences.
D3	• Evaluate own performance in the planning and manufacture of the prototype, how well aspects of the processes were followed, and reflect on how this influenced the quality of the final outcome.

© OCR 2025

.

SAMPLE

 © OCR 2025

Part B: Electronic Circuit Analysis, Drawing and Prototype Manufacture

Scenario:

Part B: Electronic Circuit Analysis, Drawing and Prototype Manufacture

The lighting company want to improve the angled desk lamp by making it automatically turn the light on or off depending on the ambient light level.

They want you to make a prototype of the electronic circuit using a Light Emitting Diode (LED).

Task 6

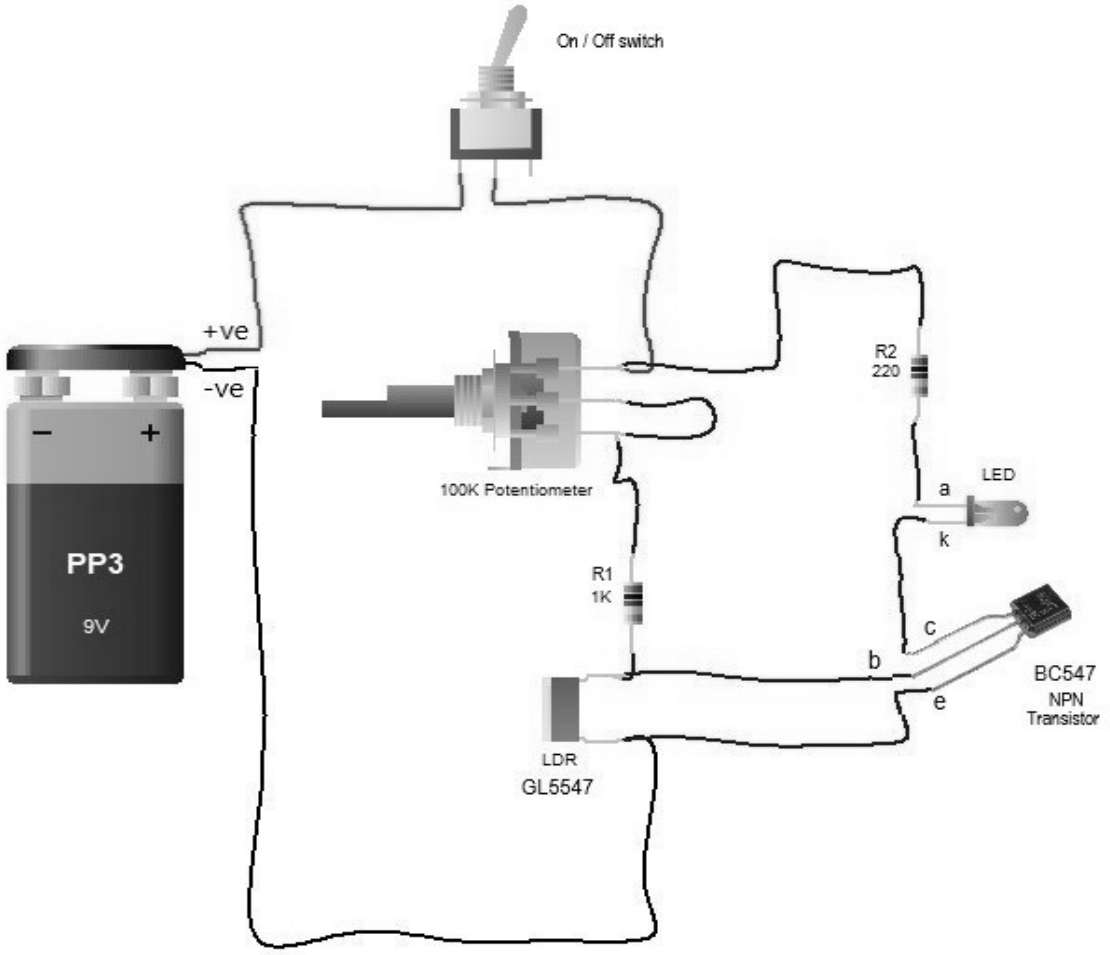
Produce a CAD drawing and simulate an electronic circuit.

Topic Area 2 is assessed in this task.

This is a picture of the electronic circuit needed to achieve the improvement. The LED should turn on when the ambient light falls below a threshold set by the potentiometer. The LED should turn off when the ambient light goes above this threshold.

SAMPLE

© OCR 2025



The task is:

Produce a CAD engineering drawing of the electronic circuit diagram using standard drawing conventions.

Simulate the circuit in operation so you can complete these tests. Use the test table in Appendix A to record your simulated values.

Parameter	**Explanation**
V_{R2}off	Voltage across R2 when the LED is off
V_{LDR}off	Voltage across LDR when the LED is off
$I_T$off	Total current through the circuit when the LED is off
V_{R2}on	Voltage across R2 when the LED is off
V_{LDR}on	Voltage across LDR when the LED is off
$I_T$on	Total current through the circuit when the LED is on

Your evidence **must** include:

© OCR 2025

- Final CAD drawing of the electronic circuit diagram.
- Annotated screenshots of the simulation of the electronic circuit in operation.
- A completed test table (Appendix A) showing simulated values.
- Annotated screenshots of any simulated testing completed, including connections of virtual test equipment and readings.

Use the assessment criteria below to tell you what you need to do in more detail.

Pass	Merit	Distinction
P8: Produce a CAD drawing of the electronic circuit diagram using engineering drawing standards. (PO4)		
P9: Simulate the electronic circuit to demonstrate its correct operation. (PO4)		**D4: Use** correct methods to measure appropriate values and voltages from the simulated circuit. (PO2)

SAMPLE

© OCR 2025

Assessment Guidance

This assessment guidance gives you information to meet the assessment criteria. There might not be additional assessment guidance for each criterion. It is only given where it is needed. You must read this guidance before you complete your evidence.

Assessment Criteria	Assessment guidance
P8	• The circuit diagram must be an accurate representation of the required circuit and be drawn to meet current engineering drawing standards (e.g. BS 60617).
P9	• Students must use simulation to show the function of the circuit to meet the stated requirement(s).
D4	• Students need to use correct testing methods and virtual test equipment to generate the results required.

SAMPLE

© OCR 2025

Task 7

Plan the safe manufacture of a prototype electronic circuit

Topic Area 3 is assessed in this task.

Before you can manufacture a prototype of the electronic circuit (Task 8), you need to plan how you will do this including component layout, what equipment and tools you will use and the safety considerations. It is important that you also think about sustainability considerations as part of this process.

The prototype of the electronic circuit can be made using either stripboard or a printed circuit board.

The task is:

Produce planning documentation to use when manufacturing the prototype of the electronic circuit.

Your evidence **must** include:

- Written planning documentation.

Use the assessment criteria below to tell you what you need to do in more detail.

Pass	Merit	Distinction
P10: Produce a layout diagram for either a strip board or a printed circuit board substrate. (PO4)	**M6: Explain** how you have considered sustainability in your planning of the prototype electronic circuit. (PO2)	
P11: Produce an appropriate risk assessment for manufacturing the prototype electronic circuit. (PO4)	**M7: Produce** a manufacturing plan for the prototype electronic circuit, including the correct sequence of operations and use of equipment/tools. (PO4)	

SAMPLE

© OCR 2025

Task 8

Manufacture a prototype of an electronic circuit

Topic Area 4 is assessed in this task.

Now that you have produced your electronic circuit diagram and planning documentation, you are ready to manufacture a prototype of the electronic circuit. It is important that you also think about sustainability considerations as part of this process.

You will now manufacture your prototype using your electronic circuit diagram and planning documentation.

Your teacher will need to observe you.

The task is:

To manufacture the prototype following safe working practices.

The prototype must work to the minimum level of operation:
- The LED should turn on when the ambient light falls below a threshold set by the potentiometer.
- The LED should turn off when the ambient light goes above this threshold.

Your evidence **must** include:

- A teacher observation record describing how you manufactured the prototype. This should be completed by your teacher and signed by you and your teacher.
- Annotated photographs and/or audio-visual evidence of the processes used when manufacturing the prototype electronic circuit board.
- Annotated photographs and/or audio-visual evidence to show the prototype electronic circuit working as described in the task.

Use the assessment criteria below to tell you what you need to do in more detail.

Pass	Merit	Distinction
P12: Safely **manufacture** the prototype electronic circuit on stripboard or printed circuit board substrate using appropriate processes and considering sustainability. (PO4)		
P13: Demonstrate that the prototype electronic circuit operates as		

SAMPLE

 © OCR 2025

required. (PO3)		

SAMPLE

© OCR 2025

Assessment Guidance

This assessment guidance gives you information to meet the assessment criteria. There might not be additional assessment guidance for each criterion. It is only given where it is needed. You must read this guidance before you complete your evidence.

Assessment Criteria	Assessment guidance
P12	• Teacher observation records should describe whether the processes and equipment/tools were set-up, operated and shutdown appropriately and their use was appropriate to the required task, including evidence of sustainability considerations being taken into account. • Students must be able to perform the task safely to achieve this criterion. Staff must intervene if safe working practices are not being followed but where this happens the criteria cannot be awarded as achieved.
P13	• It is acceptable for any faults found to be corrected in order to be able to show that the prototype electronic circuit works.

SAMPLE

© OCR 2025

Task 9

Evaluation of the prototype electronic circuit

Topic Area 5 is assessed in this task.

It is good practice in industry to review the ways in which you work and the processes used as well as the end product.

You will now evaluate the prototype electronic circuit made in Task 8.

The task is:

Evaluate the prototype electronic circuit you have manufactured and the processes you followed.

Use the test table in Appendix A to record your actual values from functional testing.

Your evidence **must** include:

- Annotated photographs evidencing visual and functional inspection.
- The completed test table (Appendix A).
- A written report of your findings

Use the assessment criteria below to tell you what you need to do in more detail.

Pass	Merit	Distinction
P14: Complete functional testing to safely measure relevant voltages and currents from the prototype circuit in operation and record your results. (PO4)	**M8: Evaluate** the prototype electronic circuit you have manufactured using visual inspection. (PO3)	**D5: Analyse** the simulated values against the actual values recorded from the physical prototype. (PO3)
		D6: Evaluate the simulation, planning and manufacturing processes used explaining any improvements you would make. (PO3)

SAMPLE

© OCR 2025

Assessment Guidance

This assessment guidance gives you information to meet the assessment criteria. There might not be additional assessment guidance for each criterion. It is only given where it is needed. You must read this guidance before you complete your evidence.

Assessment Criteria	Assessment guidance
P14	• Students must be able to perform the task safely to achieve this criterion. Staff must intervene if safe working practices are not being followed but where this happens the criteria cannot be awarded as achieved.
D5	• The analysis should include a justification of any differences between the simulated values and the actual values.

SAMPLE

© OCR 2025

Appendix A

Test table for use in Tasks 6 and 9.

Parameter	**Explanation**	**Simulated values (Task 6)**	**Actual values (Task 9)**
V_{R2}off	Voltage across R2 when the LED is off		
V_{LDR}off	Voltage across LDR when the LED is off		
$I_T$off	Total current through the circuit when the LED is off		
V_{R2}on	Voltage across R2 when the LED is off		
V_{LDR}on	Voltage across LDR when the LED is off		
$I_T$on	Total current through the circuit when the LED is on		

SAMPLE

© OCR 2025

Teacher Observation Record Form – Task 4

Use this form to record what is observed.
Read the **guidance notes** below the form **before** you complete the form.

OCR Level 3 Alternative Academic Qualification Cambridge Advanced Nationals in Engineering (Certificate)/(Extended Certificate)

Unit number:	F132
Unit title:	Engineering in Practice
Task number:	4
Task title:	Making a mechanical prototype

Student's name:	
Date the activity was completed:	

What extra evidence is attached to the form?	

The **teacher** fills in this section:

What Assessment Criteria does this activity relate to?	
How does the activity meet the requirements of the Assessment Criteria? You **must** describe: 1. what the student did 2. how it relates to the relevant Assessment Criteria	
Teacher's name:	
Teacher's signature:	
Date:	

SAMPLE

© OCR 2025

The **student** fills in this section:

I agree with my teacher's description of how I completed this activity Yes ☐	
Use this space to make any extra comments.	
Student's signature:	
Date:	

Guidance notes

Both the teacher **and** the student are responsible for completing this form.

The **teacher must**:
- use the form to describe in detail what they observed the student doing.
- give contextualised details of what the student did and how this relates to the Assessment Criteria.
- say how well the activity was completed in relation to the Assessment Criteria with reasons.
- share what they have written with the student and offer the opportunity to discuss if the student disagrees with what is written.
- reach agreement with the student before the work is submitted for moderation.
- sign and date the form as evidence of agreement.

The **student must**:
- reach agreement with the teacher before the work is submitted for moderation.
- use the form to show that they agree with the teacher's record of the activity observed
- sign and date the form as evidence of agreement.

The form **must**:
- be accompanied by extra evidence, as required by the task.
- provide evidence that is individual to the student.

The form **must not**:
- contain a simple repeat of the Assessment Criteria.
- contain just a list of skills.
- be completed by anyone other than the teacher observing the activity and the student completing the activity.
- be written by the student for the teacher to sign.

SAMPLE

 © OCR 2025

- be used to evidence achievement of a whole unit or task in isolation.

SAMPLE

 © OCR 2025

Teacher Observation Record Form – Task 8

Use this form to record what is observed.
Read the **guidance notes** below the form **before** you complete the form.

OCR Level 3 Alternative Academic Qualification Cambridge Advanced Nationals in Engineering (Certificate)/(Extended Certificate)

Unit number:	F132
Unit title:	Engineering in Practice
Task number:	8
Task title:	Making a prototype of an electronic circuit

Student's name:	
Date the activity was completed:	

What extra evidence is attached to the form?	

The **teacher** fills in this section:

What Assessment Criteria does this activity relate to?	
How does the activity meet the requirements of the Assessment Criteria? You **must** describe: 1. what the student did 2. how it relates to the relevant Assessment Criteria	
Teacher's name:	
Teacher's signature:	
Date:	

SAMPLE

© OCR 2025

SAMPLE

 © OCR 2025

The **student** fills in this section:

I agree with my teacher's description of how I completed this activity Yes ☐	
Use this space to make any extra comments.	
Student's signature:	
Date:	

Guidance notes

Both the teacher **and** the student are responsible for completing this form.

The **teacher must**:
- use the form to describe in detail what they observed the student doing.
- give contextualised details of what the student did and how this relates to the Assessment Criteria.
- say how well the activity was completed in relation to the Assessment Criteria with reasons.
- share what they have written with the student and offer the opportunity to discuss if the student disagrees with what is written.
- reach agreement with the student before the work is submitted for moderation.
- sign and date the form as evidence of agreement.

The **student must**:
- reach agreement with the teacher before the work is submitted for moderation.
- use the form to show that they agree with the teacher's record of the activity observed
- sign and date the form as evidence of agreement.

The form **must**:
- be accompanied by extra evidence, as required by the task.
- provide evidence that is individual to the student.

The form **must not**:
- contain a simple repeat of the Assessment Criteria.
- contain just a list of skills.
- be completed by anyone other than the teacher observing the activity and the student completing the activity.
- be written by the student for the teacher to sign.

SAMPLE

 © OCR 2025

- be used to evidence achievement of a whole unit or task in isolation.

SAMPLE

 © OCR 2025

NEA Command Words

The table below shows the command words that may be used in the NEA assignments and/or assessment criteria.

Command Word	Meaning
Adapt	• Change to make suitable for a new use or purpose
Analyse	• Separate or break down information into parts and identify their characteristics or elements • Explain the pros and cons of a topic or argument and make reasoned comments • Explain the impacts of actions using a logical chain of reasoning
Assess	• Offer a reasoned judgement of the standard or quality of situations or skills. The reasoned judgement is informed by relevant facts
Calculate	• Get a numerical answer, showing how it has been worked out
Classify	• Arrange in categories according to shared qualities or characteristics
Compare	• Give an account of the similarities and differences between two or more items, situations or actions
Conclude	• Judge or decide something
Describe	• Give an account that includes all the relevant characteristics, qualities, or events
Discuss (how/whether/etc)	• Present, analyse and evaluate relevant points (for example, for/against an argument) to make a reasoned judgement
Evaluate	• Make a reasoned qualitative judgement considering different factors and using available knowledge/experience
Examine	• To look at, inspect, or scrutinise carefully, or in detail
Explain	• Give reasons for and/or causes of something • Make something clear by describing and/or giving information
Interpret	• Translate information into recognisable form • Convey one's understanding to others, e.g. in a performance
Investigate	• Inquire into (a situation or problem)
Justify	• Give valid reasons for offering an opinion or reaching a conclusion
Research	• Do detailed study in order to discover (new) information or reach a (new) understanding
Summarise	• Express the most important facts or ideas about something in a short and clear form

SAMPLE

© OCR 2025

We might also use other command words but these will be:

- commonly used words whose meaning will be made clear from the context in which they are used (e.g. create, improve, plan)
- subject specific words drawn from the unit content.

OCR would like to acknowledge the following: *Page 6 and 7 Table Lamp stock photo – imran kadir photography /Gettyimages.com*

SAMPLE

 © OCR 2025